

## Solar and Wind Power Heritage



*Photovoltaics demonstration project*



*Wind turbine*

The Center has tremendous talent and capabilities that can provide benefits beyond its physical boundaries. While focusing on NASA's missions, we must be good citizens of the State of Ohio and provide benefits to the taxpayers. This can be accomplished through the formation of partnerships, use of our technology to spur new businesses and industries, and outreach efforts.

*Glenn Center Goal: "Become an integral part of the Ohio community and the Nation."*

*Woodrow Whitlow, Jr.  
Director, NASA Glenn Research Center*

### NASA Glenn Research Center

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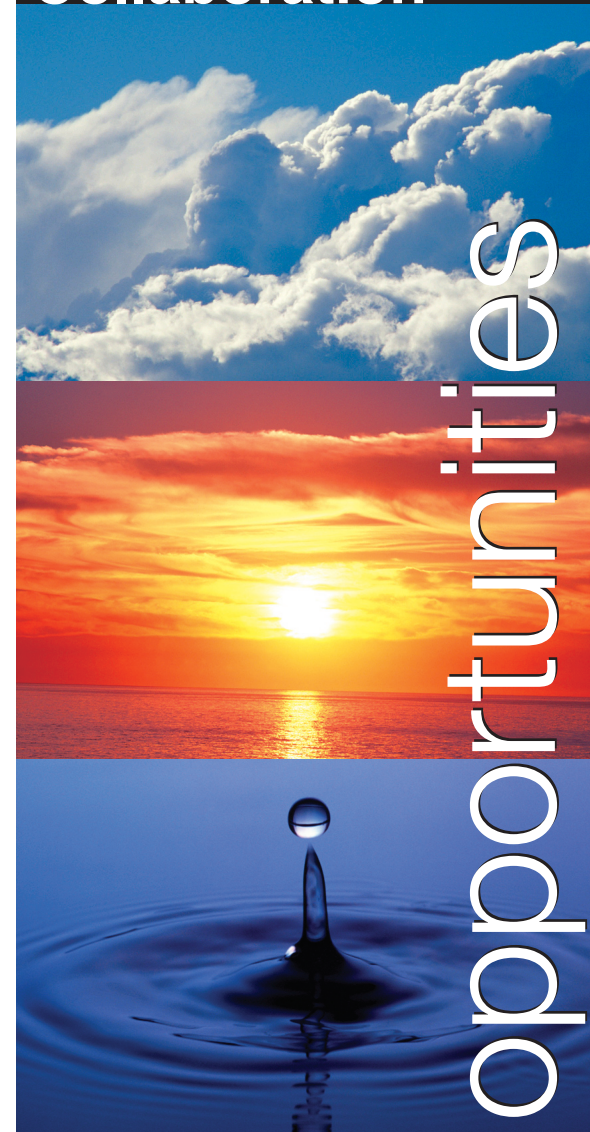
Glenn Research Center Facilities  
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National Aeronautics and  
Space Administration



## Advanced Energy Collaboration





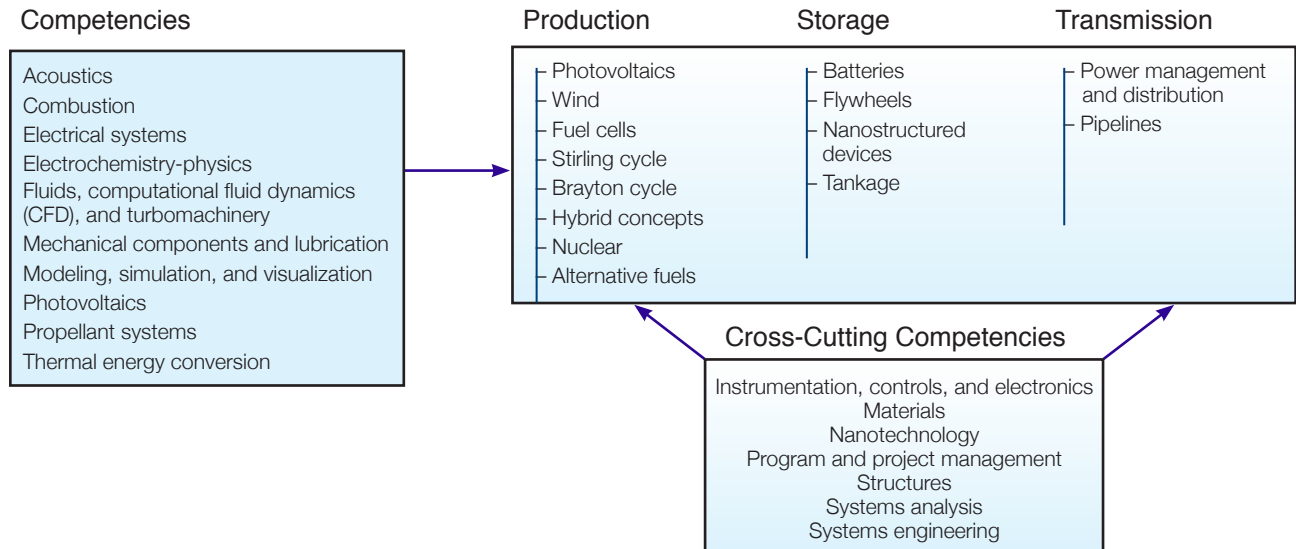
# Fulfilling NASA missions while guiding future business opportunities

## World-Class Competencies • Technologies • Facilities

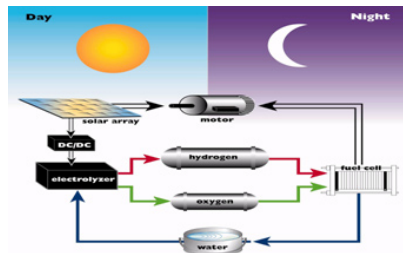
NASA Glenn Research Center's world-class competencies, facilities, technologies, and staff support NASA's missions of Exploration, Space Operations, Aeronautics, and Science. The Business Development and Partnership Office will work with external organizations to discover opportunities to collaborate, leverage resources, and develop the necessary technologies and products for the future.

### Competencies

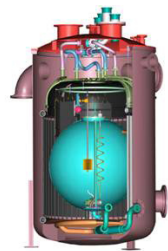
#### Advanced Energy Research and Development



### Technologies: Power and propulsion competencies applied to energy solutions



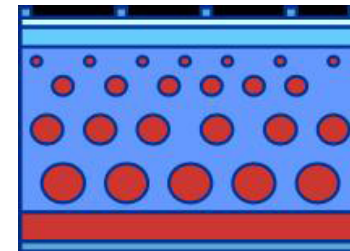
Electrochemistry-physics



Propellant systems



Photovoltaics-powered rover

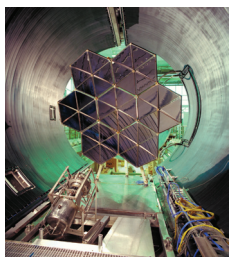


Nanophotovoltaics



Mechanical components

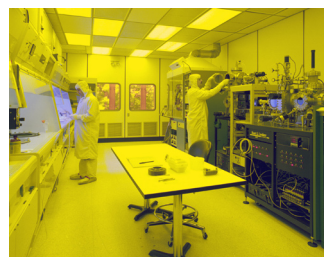
### Facilities/Test Hardware: Premier facilities available for collaboration



Solar concentrator



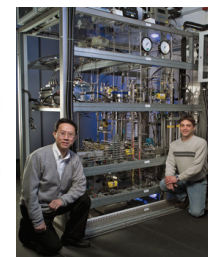
Fuel cells test lab



Instrumentation and controls lab



Fuel cell and electrolyzer in the regenerative fuel cell rig



Slush hydrogen and densification lab